Deconstructing the Manipulation of Paulo Freire in 'A Face Oculta': Algorithmic Analysis of Media Narratives

Deconstruyendo la manipulación de Paulo Freire en 'A Face Oculta': análisis algorítmico de narrativas mediáticas

Desconstruindo a Manipulação de Paulo Freire em 'A Face Oculta': Análise Algorítmica de Narrativas Midiáticas

Carlos Busón Buesa
Universidade Federal de Mato Grosso do Sul (UFMS)
Brasil

Lucilene Machado Garía Arf
Universidade Federal de Mato Grosso do Sul (UFMS)
Brasil

Jorge Chaves de Moraes
Universidade Petrobras
Brasil

Abstract: This article analyzes the media manipulation of intellectual figures through the documentary "A Face Oculta de Paulo Freire", produced by Brasil Paralelo on YouTube. A methodology combining discourse analysis, sentiment analysis, detection of argumentative fallacies, and framing study using algorithmic techniques was applied. The results reveal a systematic pattern of emotional and argumentative distortion aimed at undermining the critical thinking associated with Freire. The study proposes the Fallacy Density Index (FDI) as a tool to measure discursive manipulation in audiovisual media. Finally, it highlights the need to strengthen critical media literacy in the face of disinformation dynamics, contributing to the field of critical studies on communication, democracy, and digital technologies through the use of textual and emotional analysis algorithms.

Keywords:
Disinformation, media literacy, argumentative fallacies, Paulo Freire, media manipulation

Resumen: Este artículo analiza la manipulación mediática de figuras intelectuales a través del documental "A Face Oculta de Paulo Freire", producido por Brasil Paralelo en YouTube. Se aplicó una metodología que combina análisis discursivo, análisis de sentimientos, detección de falacias argumentativas y estudio de framing mediante técnicas algorítmicas. Los resultados muestran un patrón sistemático de distorsión emocional y argumentativa destinado a erosionar el pensamiento crítico asociado a Freire. Se propone el Índice de Densidad de Falacias (IDF) como herramienta para medir la manipulación discursiva en medios audiovisuales. Finalmente, se destaca la necesidad de fortalecer la alfabetización mediática crítica frente a dinámicas de desinformación, contribuyendo al campo de los estudios críticos de comunicación, democracia y tecnologías digitales mediante algoritmos de análisis textual y emocional.

Palabras clave:
Desinformación, alfabetización mediática, falacias argumentativas, Paulo Freire, manipulación mediática

Resumo: Este artigo analisa a manipulação midiática de figuras intelectuais por meio do documentário "A Face Oculta de Paulo Freire", produzido pela Brasil Paralelo no YouTube. Aplicou-se uma metodologia que combina análise discursiva, análise de sentimentos, detecção de falácias argumentativas e estudos de enquadramento, utilizando técnicas algorítmicas. Os resultados demonstram um padrão sistemático de distorção emocional e argumentativa, visando à erosão do pensamento crítico associado a Freire. O Índice de Densidade de Falácias (IDF) é proposto como ferramenta para mensurar a manipulação discursiva em mídias audiovisuais. Por fim, o artigo destaca a necessidade de fortalecer a alfabetização midiática crítica diante das dinâmicas de desinformação, contribuindo para o campo dos estudos críticos de comunicação, democracia e tecnologias digitais por meio de algoritmos de análise textual e emocional.

Palavras-chave:
Desinformação, alfabetização midiática, falácias argumentativas, Paulo Freire, manipulação da mídia

1. Introduction

The work of Paulo Freire (1921-1997) is fundamental to critical education, focused on "consciousness raising" and the liberation of the oppressed. Freire argues that "education must be a process of social transformation" where students are "active subjects" who question their reality (Freire, 1970), in contrast to the traditional model of "banking education," proposing education as participatory dialogue.

However, his pedagogy has been the subject of intense criticism, particularly in Brazil, where far-right neoliberal sectors have sought to construct him as a "national enemy" to delegitimize his influence (Godoi & Dimitrov, 2022). This process of demonization intensifies in the context of a "culture war" (Godoi & Dimitrov, 2022), where Freire's emancipatory philosophy is presented as a threat to the depoliticization of education (Feitosa et al., 2022). Vrydagh and Jiménez-Martínez (2021) highlight how this discontent has been exploited to foster hostility toward his legacy, even affecting educational debate.

Attacks on Freire are not limited to the discursive level: they have also translated into political actions that deepen social inequalities, as analyzed by Ribeiro de Almeida Chacon et al., (2023). In the digital realm, platforms such as YouTube have played a key role in disseminating hate speech against Freire (Busón, 2020), thereby expanding the reach of these disinformation strategies. Faced with this scenario, Costa et al. (2021) underline the importance of rescuing their teachings for a transformative education.

Freire's figure has been subject to multiple reinterpretations, frequently associating him with Marxism and the class struggle (Gadotti, 1996), thereby distorting his pedagogical approach, which focuses on the emancipation of the oppressed (Freire, 1970). The documentary "*A Face Oculta de Paulo Freire*", produced by Brasil Paralelo, Freire is part of this trend, using emotional resources and disinformation strategies to construct a distorted image. This study analyzes these strategies, articulating Entman's (1993) theoretical framework, Lewandowsky et al.'s (2012) fallacy analysis, and Pennebaker et al.'s (2007) sentiment analysis.

Despite the attacks, research such as that by Gadotti (1996) and Costa et al. (2021) reaffirms that Freire's legacy has empowered marginalized communities and promoted critical thinking on a global scale. This analysis seeks to consider both the challenges and contributions of his educational approach.

1.1 A Culture War

The expansion of attacks against Freire is part of a broader "culture war" where narratives about education and Brazil's past are contested (Godoi & Dimitrov, 2022). Brasil Paralelo, founded in 2016, emerges as a key player in this conflict, promoting a revisionist approach favorable to the far right (Bonsanto, 2022). Picoli et al. (2020) denounce how this perspective distorts historical truth and fosters an "education for barbarism."

Da Silva Martins (2024) suggests that Brasil Paralelo's revisionism demands a robust academic response. Santos (2021) reveals how this production company employs disinformation to reinforce conservative hegemony, a phenomenon that Gruner and Cleto (2021) extend to the context of the pandemic, highlighting its resistance to scientific truths. Salgado and Ferreira (2021) complement this by pointing out that Brasil Paralelo's media production seeks to legitimize a particular ideological vision.

In the field of education, Oliveira (2023) shows how the trilogy "Pátria Educadora" (Educator Homeland) by Brasil Paralelo has influenced the ideology of Bolsonarism, while Finger (2022) warns about the penetration of anti-scientific discourses into education through digital media. Faced with this scenario, Moraes and Cleto (2023) propose that analyzing the narrative temporality of Brasil Paralelo can be key to dismantling its historical construction, while Magalhães Rodrigues (2022) raises the need to confront its "reason of convenience" through critical dialogical approaches that resist post-truth.

Along these same lines, Busón et al. (2022) analyze how digital platforms, such as YouTube, become spaces of intensified ideological dispute, where polarizing narratives find echo and massive reproduction.

1.2 Background

This study analyzes the documentary "A Face Oculta de Paulo Freire," produced by Brasil Paralelo, a group known for its conservative ideological approach and revisionist agenda on historical and educational issues. Founded in 2016, Brasil Paralelo plays a central role in Brazil's culture war, reinterpreting historical events from a perspective favorable to the far right (Bonsanto, 2022).

Several authors have criticized this approach: Picoli et al. (2020) denounce how it distorts historical truth and promotes an "education for barbarism," while Da Silva Martins (2024) argues

that its revisionism demands a critical academic response. Santos (2021) analyzes its alignment with ultra-liberal agendas, utilizing disinformation to consolidate conservative hegemony —a phenomenon intensified during the pandemic, as noted by Gruner and Cleto (2021) and Salgado and Ferreira (2021).

The impact of Brasil Paralelo also extends to the educational field. Oliveira (2023) examines how the Pátria Educadora trilogy has shaped the narratives of Bolsonarism, while Finger (2022) warns about the dissemination of anti-scientific discourses in digital media, which affects the critical education of new generations.

Faced with this ideological offensive, Moraes and Cleto (2023) propose analyzing the temporal construction of Brasil Paralelo's narratives to promote a deeper critical confrontation. Magalhães Rodrigues (2022) emphasizes the need to deconstruct its narratives through a dialogical approach that confronts post-truth and restores a more rigorous and critical historical understanding.

2. Methodology

This study proposes a methodology that integrates framing analysis (Entman, 1993), emotional language analysis (Pennebaker et al., 2007), and logical fallacy detection (Walton, 2012; Lewandowsky et al., 2012), assisted by textual analysis tools such as Syuzhet in R and VADER in Python. This approach combines elements from various disciplines to detect misinformation in audiovisual materials, representing an innovative approach compared to previous studies that addressed these aspects in isolation.

Entman's (1993) theory holds that the media select and emphasize certain aspects of reality to influence public interpretation. Pennebaker et al. (2007) highlight that emotionally charged words predispose viewers toward either positive or negative interpretations, while Lewandowsky et al. (2012) analyze how misinformation that combines facts and falsehoods affects perception. These conceptual frameworks allow us to understand how a critical documentary can subtly manipulate emotions and perceptions.

The methodological approach combines sentiment analysis and qualitative analysis of rhetorical devices, employing algorithms to answer the following research questions: What discursive features in "A Hidden Face of Paulo Freire" suggest a manipulative intent in the

representation of Paulo Freire? Is it possible to detect patterns of manipulation using text analysis algorithms?

The study examines the impact of fallacies, misinformation, and fake news, focusing on a documentary that attempts to shape public opinion about Freire. Tools such as Syuzhet enable the mapping of emotional polarization and narrative structure, providing a comprehensive approach to assessing how audiovisual narratives can distort perceptions.

The main objective is to analyze how the emotional language and argumentative fallacies present in the documentary distort critical perceptions of his educational legacy, through:

a) Identification and classification of the fallacies used and their impact on public perception.

b) Analysis of framing patterns that present Freire as a radical or confused intellectual.

c) Evaluation of the potential and limitations of algorithms in detecting disinformation.

The material was selected due to its widespread dissemination on digital platforms and its explicit ideological content, constituting an emblematic case for studying the role of framing and fallacies in the media manipulation of critical pedagogical figures.

Syuzhet and VADER, widely used in the analysis of sentiments and media narratives (Jockers, 2017; Liu, 2012), offered a robust quantitative approach for identifying emotional and narrative patterns. However, it is essential to acknowledge that their results may be influenced by cultural and contextual factors, as the emotional dictionaries they employ do not always capture the semantic nuances in critical texts such as the one analyzed here.

The Fallacy Density Index (FDI) is proposed as an emerging category for quantitatively measuring argumentative manipulation in audiovisual content. Inspired by the notions of informal logic (Walton, 2012) and studies on disinformation and fallacious rhetoric in digital contexts (Lewandowsky et al., 2012; Han, 2022), the IDF seeks to identify the level of recurrence of fallacies per unit of time, which allows for estimating the intensity of the argumentative bias of a discursive piece.

Its instrumental value lies in offering a comparative metric for evaluating media narratives with ideological or propagandistic purposes, allowing its application in both critical analysis and media literacy processes. Like other metrics used in computational linguistics or framing analysis, the IDF does not aim to exhaust the complexity of discourse, but rather to contribute to making visible rhetorical structures that tend to inhibit critical thinking.

3. Results

3.1 Word Cloud Analysis

A tag cloud is a visual representation of keywords that describe online content. According to Kaser and Lemire (2007), tag clouds are similar to histograms. However, unlike histograms, which show frequencies of a few elements, tag clouds can encompass hundreds, making them ideal for identifying repeated words in a text. Although they are not definitive, they offer clues about their content. In the transcript of the documentary "tag cloud 1" (Figure 2), terms related to Freire's work are evident, such as "Pedagogy of the Oppressed" (1970), with out-of-context quotes linking his work to politics rather than education. Words such as "*violencia*", "*revolução*", "*revolucionario*", "*marxismo*", and "*assassinato*" stand out, suggesting the focus of the material.

Following Entman (1993), who argues that framing involves selecting and highlighting certain aspects of reality, the documentary identifies political, educational, and ideological frameworks that shape the viewer's perception. Through lexical selection and narrative structure, criticisms of Freire are reinforced, and the possibilities for a balanced understanding of his legacy are limited.

3.2 Frame Identification

Political Framework: Freire's pedagogy is criticized for its connection to Marxism and its defense of class struggle, emphasizing his opposition to capitalism.

Educational Framework: His criticism of "*educação bancária*" is contrasted with "*educação libertadora*", distorting the participatory approach of his proposal.

Ideological/Religious Framework: A forced synthesis between Christianity and Marxism is suggested in his thought.

As Entman (1993) points out, "framing essentially involves selection and salience" (p. 52); here, a framing is evident that presents Freire as radical, focusing on his relationship with Marxism.

Selection and Salience

The documentary selects terms such as "opresores", "revolución", "*luta de classes*", and "capitalismo", reinforcing a polarized frame. Pejorative terminology such as "linguistic armadilhas" and "festival of metaphors" is used to disparage his work. This thematic emphasis

reinforces the perception of an underlying ideological agenda, as Gitlin (1980) describes regarding "selection and emphasis" in communicative frames.

Text Structure

The narrative structure begins by praising Freire and then demystifies him through progressive critiques, following Goffman's (1986) concept of the interpretive frames that guide the understanding of "what is happening" (p. 8). This shift in tone intensifies the emotional impact and prepares the viewer to reject his legacy.

Omissions and Approaches

The documentary overlooks the positive and globally recognized aspects of Freire's pedagogy, instead focusing solely on his association with Marxism and simplifying the complexity of his thought to a narrow political agenda. As Gitlin (1980) points out, frames function as "principles of selection, emphasis, and presentation" (p. 6), biasing the viewer's understanding.

Function of Framing

Problem Diagnosis: Marxist influence is identified as the central problem in Freire's work.

Moral Evaluation: It is implicitly suggested that his pedagogy is confusing, manipulative, and promotes violence.

Recommended Solutions: Although not explicitly stated, the need to reject Freire-inspired educational models is implied. This mechanism responds to what Lakoff (2004) defines: "frames are mental structures that shape the way we see the world" (p. xi), construing Freire as an ideological threat.

Impact on Perception

The framing used in the documentary leads to a perception of Freire as a confusing and radical intellectual, triggering emotions of distrust and rejection. By associating him with revolutionary figures and discourses of violence, negative stereotypes are reinforced in audiences unfamiliar with his work. According to Iyengar (1991), episodic and ideological frames can

influence the attribution of responsibility, distorting public perception through the use of striking visual images and simplified narratives.

3.3 Results of the Fallacy Analysis

After reviewing the documentary, numerous fallacies that distort Freire's work were identified. This documentary exemplifies how fallacies construct a distorted image, taking a topic out of context to attack Paulo Freire's legacy.

According to Walton (2012), detecting fallacies in a discourse is essential because it enables us to ensure clarity and argumentative rigor, thereby preventing interlocutors from being intimidated by personal attacks and encouraging them to evaluate arguments critically (p. 246). Furthermore, identifying fallacies promotes critical dialogue, allowing criticisms to be answered constructively, given that "an argument against a person is often a revocable criticism" (p. 234). Walton (2012) also warns that rhetorical manipulation can occur when authority is overused, which can suppress critical questioning (p. 287). Ultimately, the ability to detect fallacies is crucial for developing practical critical analysis, particularly in contexts where technical communication can lead to misunderstandings (p. 277). Of the fallacies identified, we highlight how the figure of Paulo Freire was distorted in the documentary, manipulating concepts out of their original context and mistakenly associating him with dictatorships and violence. Below, we will address some of these fallacies:

- **Ad Hominem**

"*O principal livro de Paulo Freire não contém um método de ensino, mas a defesa de uma educação instrumentalizada para a formação de militantes revolucionários*" (≈ 22:43). Freire's work is questioned not because of his arguments, but because of the assumption that he seeks to train militants, ignoring the broader context of his work. Lewandowsky et al. (2012) state that “ad hominem fallacies divert attention from the real argument and can delegitimize the opponent's position” (p. 540).

- **False Dichotomy**

"*Uma vez estipulado que a educação libertadora é aquela que conduz os estudantes à revolução..."* (≈ 21:18). An opposition is presented between love and revolution, suggesting that they cannot coexist, ignoring historical examples where change has been promoted without extreme violence.

• Straw man

"Exceto por essa, e alguns outras experiências pontuais o método Paulo Freire nunca foi aplicando no Brasil" (≈ 2:29). It is argued that Freire's method has not been rigorously tested and has only gained relevance due to its ideology, which simplifies and distorts its pedagogy. This approach ignores the 1960 revolutionary experiment in Brazil and dismisses the application of his method in numerous countries.

For Walton (2012), informal logic provides us with the necessary tools to analyze arguments in real-world contexts, where premises can be complex and conclusions are not always obvious. He also mentions that "understanding the logical basis of inconsistency is another very useful tool" (Walton, 2012, p. 152), suggesting that the ability to identify inconsistencies in arguments is crucial to avoiding misunderstandings.

A critical education should foster the ability to identify fallacies and evaluate the validity of arguments, which is essential in an information-saturated world. By developing citizens capable of reflective and logical analysis, we not only prevent misinformation but also strengthen independent thinking and promote constructive debate.

3.4 Fallacy Density Index (FDI)

Han (2022) highlights that information overload makes us vulnerable to misinformation due to the lack of time for in-depth critical analysis. This rapid information overload fragments our ability to make rational decisions. Applying this idea to documentary filmmaking, we developed the Fallacy Density Index (FDI) (Tables 1 and 2) as a quantitative tool to identify the degree of discursive manipulation in an audiovisual text.

Type of fallacy	**Minute ≈**	**Number of fallacies**
Ad hominem fallacy / Attacking the person rather than their argument..	8:18, 9:55, 13:21, 16:18, 22:16, 22:43	6
Appeal to tradition fallacy / Arguing that something is correct or accurate simply because it has been done that way in the past.	12:20	1
False dichotomy fallacy / Presenting only two options when there are more possible options.	9:20, 14:30, 16:21, 17:30, 21:18, 23:10, 23:20, 24:20	8

Emotional Charge (Appeal to Emotion) / Persuading by evoking emotions, rather than presenting logical arguments or evidence.	16:00	1
False analogy / Comparing two things that are not truly comparable.	15:53, 22:47, 24:10, 25:20	4
Oversimplification / Reducing a complex argument or situation to an overly simple conclusion, ignoring important nuances.	17:30	1
False causation (post hoc) / Assuming that because one event follows another, the first caused the second.	20:50, 22:25, 23:50, 27:00, 27:40	5
Straw man fallacy / Distorting someone's argument to make it easier to attack or refute.	2:29, 7:03	2
Ambiguity / Using words or expressions with multiple meanings that lead to confusion in the argument.	24:40, 25:02	2
Fallacy of Hasty Generalization / Drawing sweeping conclusions based on an insufficient sample.	7:10, 14:35, 17:30, 21:10, 23:13, 26:04, 26:50	7
Non Sequitur / Conclusions that do not follow logically from the previous premises.	18:35	1
Total		38

Table 1. Fallacies identified in the documentary "A face oculta de Paulo Freire". (Source: Own elaboration)

Gil de Zúñiga et al. (2017) highlight that "in a saturated media environment, the speed of information often replaces the depth of analysis" (p. 34), facilitating the spread of fallacies, since there is no time to evaluate their veracity critically. T. E. Johnson and B. D. McCauley (2021) add that "continuous exposure to news content that contains logical errors can lead to the acceptance of incorrect information without adequate scrutiny" (p. 42), displacing critical deliberation.

Rating	**Description**	Fallacies per minute
Critical	2 or more fallacies per minute	More than 2 fallacies per minute
Very high	High fallacy load	More than 1.5 fallacies per minute
High	High fallacy density	Between 1 and 1.5 fallacies per minute
Medium	Moderate fallacy density	Between 0.5 and 1 fallacies per minute

Low	Low fallacy density	Between 0.2 and 0.5 fallacies per minute
Very low	Very low fallacy load	Less than 0.2 fallacies per minute
Nil	No fallacies	0 fallacies per minute

Table 2. Proposed index to evaluate a document. (Source: Own elaboration)

According to Lewandowsky et al. (2012), fallacies in public discourse contribute to the spread of misinformation and social polarization, thereby distorting rational discourse and influencing behaviors and attitudes. This context highlights the need for tools to quantify and analyze distortions. Entman (1993) emphasizes that the presentation of information influences public perception, while Wolton (2009) highlights the importance of citizens developing skills to discern the quality of information (p. 209). Bennett and Livingston (2018) observed that misinformation can range from lies to distorted truths, and Pennebaker (2011) emphasizes that linguistic choices reflect underlying attitudes that impact communication.

In this context, the Fallacy Density Index (FDI) is presented as a necessary tool for evaluating the quality of media discourse, measuring the density of fallacies, and contributing to the improvement of critical literacy. Table 2 summarizes the Fallacy Density Index (FDI) classification. We propose the following equation for its calculation:

$$IDF_scaled = (2, (Number\ of\ fallacies)/T)$$
$$(T)\ is\ the\ total\ time\ in\ minutes.$$
$$If\ (I > 2), then\ (IDF_scaled = 2).$$
$$CapIf\ (I \leq 2), then\ (IDF_scaled = I).$$
$$With\ 38\ fallacies\ in\ 31\ minutes, the\ initial\ calculation\ gives\ an\ index\ of:$$
$$IDF = 38/31 \approx 1.22$$
$$Since\ (1.22\ \leq 2), then:$$
$$IDF_scaled = 1.22$$

The FDI was calculated based on the number of fallacies detected per minute in the documentary, using a qualitative analysis to validate the classification. However, it is essential to note that the identification of fallacies depends mainly on the cultural context and the analyst's prior knowledge, which introduces a margin of subjectivity.

However, the FDI faces limitations, such as the simplification of arguments and the subjectivity in identifying fallacies, which depend on the reader and their context. Despite these limitations, the FDI can be beneficial as an approach for analyzing audiovisual materials and written texts. Its application in the classroom could help students identify fallacies and develop critical thinking skills. Combined with qualitative and quantitative methodologies, the FDI can offer a more complete view of how a material is designed to inform or misinform.

Fallacies are a key component of current disinformation, and analyzing them is a valuable exercise in critical thinking. In this document, we identified 38 fallacies in 31 minutes, obtaining an FDI of 1.22 fallacies per minute. This data, combined with sentiment analysis and framing, reinforces the hypothesis that the documentary actively manipulates viewers' perceptions. The FDI is proposed as a new approach to studying misinformation in audiovisual media, useful both for critical education and for future research on media polarization.

3.5 Sentiment Analysis (Syuzhet) and Use of VADER and the Python Library

The use of Syuzhet, developed by Jockers (2017, 2023), enables the extraction of emotions and narrative arcs from texts, which is crucial to understanding the construction of narratives. This analysis is crucial for detecting misinformation, as deceptive narratives manipulate audiences' emotions. Liu (2012) highlights that sentiment analysis not only assesses emotions but also helps identify audience perceptions, which is vital when confronting manipulative information.

On the other hand, Mohammad and Turney (2013) emphasize the importance of word-emotion association lexicons, which facilitate emotional analysis in texts. This allows for the recognition of rhetorical patterns in disinformation. These tools enhance the ability to detect and analyze disinformation, promoting critical information consumption and strategies to combat manipulation.

Sentiment analysis was conducted using the Syuzhet and VADER algorithms, which allow the extraction and evaluation of the emotional charge of the content. Graph 1 (Figure 1) shows the variation in sentiment scores throughout the analyzed text. The results, obtained using the VADER dictionary and the Python library, indicate a predominance of critical emotions toward Paulo Freire, with few sections of positive scores suggesting weak moments of optimism in a primarily negative context.

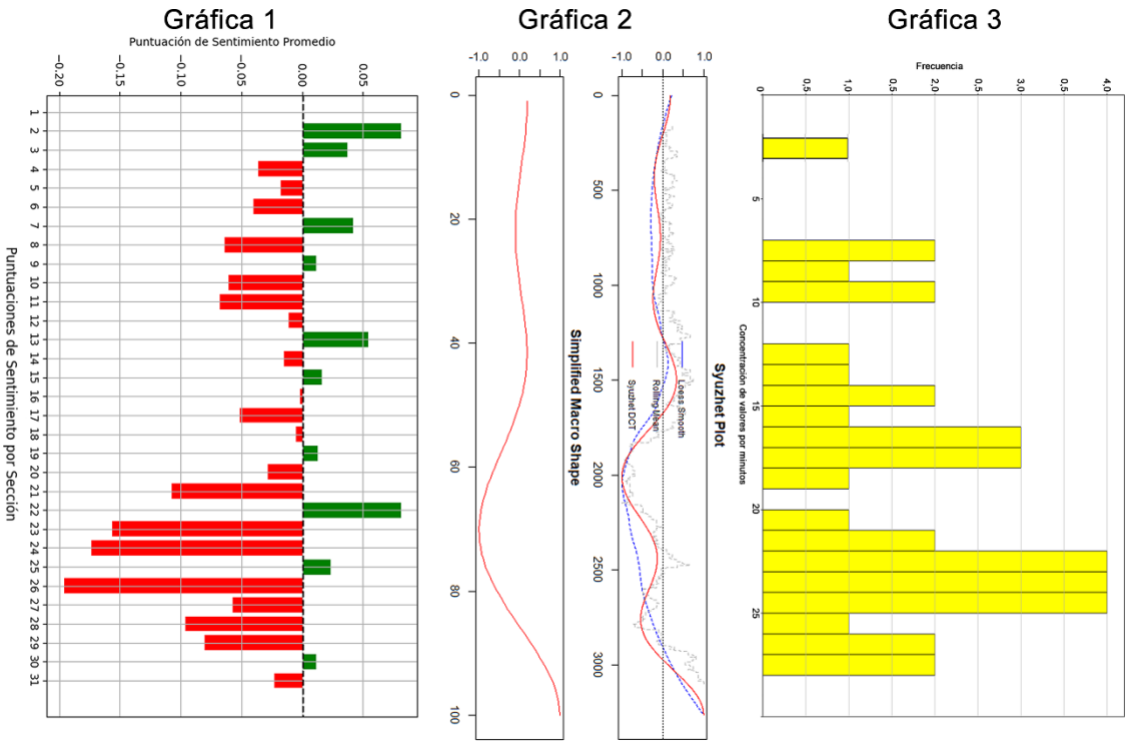


Figure 1. Combined graphs, polarity with VADER and Python; valence with Syuzhet and R; fallacies per minute, from the documentary. (Source: Own elaboration)

Graph 2 (Figure 1) represents the valence analysis using Syuzhet, where the X-axis at 0 indicates emotional neutrality. Values above the axis reflect positive emotions, while values below indicate negative emotions. The blue line plots valence over time, revealing peaks and valleys that represent significant emotional moments. Despite a slightly positive start, the majority of the analysis shows a substantial load of negative sentiments, with two peaks of criticism toward Freire confirming the overall trend of the discourse.

Finally, Graph 3 (Figure 1) illustrates the concentration of fallacies per minute in the documentary, as elaborated in Table II and generated using Python. This graph reveals that the peaks in the number of fallacies coincide with moments of most extraordinary emotional polarization. This cross-referencing of data between the IDF and sentiment analysis suggests that the documentary not only employs argumentative fallacies but also manipulates viewers' emotions, intensifying negative perceptions toward Freire. Together, these graphs reinforce the usefulness of the IDF as a tool for analyzing information in audiovisual documents.

As mentioned above, we generated a word cloud from the transcript to identify the words that were most frequently cited in the document, "Tag Cloud 1" (Figure 2). Although this

visualization highlights the relevance of certain words, it does not reveal the context in which they are used. By developing a positive and negative word cloud using the VADER dictionary adapted to Portuguese (Joaquim, 2021) and natural language processing tools in Python, "tag cloud 2" (Figure 2), we can observe how words cluster according to their emotional charge, thereby identifying the polarity of the content. Larger words indicate greater frequency, graphically representing the emotional polarity of the text and helping to visualize the dominant emotional trend.

The repetition of fallacies such as ad hominem and false dichotomy in "A Face Oculta de Paulo Freire" not only distorts Freire's arguments but also reinforces a polarized perception of him, suggesting a narrative strategy aimed at delegitimizing his pedagogy by decontextualizing his ideas and associating them with ideologies. Extreme.

According to Van Dijk (1998), simplified associations in discourse, such as linking Freire with revolutionary figures, serve as delegitimization strategies that obscure the complexity of his contributions and reduce his legacy to a narrow political agenda. This process distorts essential components such as critical dialogue and cultural literacy, projecting a radicalized image that rejects his proposals without in-depth analysis.

The documentary uses a framing that links Freire with figures such as Guevara and Lenin, suggesting that his pedagogy encourages violence. This framing simplifies his notion of liberatory education, ignoring its ethical foundations. As Entman (1993) and Lakoff (2004) note, these frames activate ideological stereotypes that significantly influence public perception. Expressions such as “Paulo Freire's anti-capitalism” illustrate an intentional selection of ideological aspects to minimize his pedagogical legacy and emphasize a presumed political agenda.



Figure 2. Cloud of labels with the words from the transcription "tag cloud 1" and the negative and positive words "tag cloud 2" made with VADER and Python. (Source: Own elaboration)

The use of decontextualized quotes, such as "education that does not recognize just radical thought is wrong," reinforces this criticism by mistakenly associating his thinking with violence. Zimbardo and Leippe (1991) emphasize that the manipulation of contexts facilitates the acceptance of distorted interpretations as apparent truths.

The argumentative fallacies identified in the documentary manipulate the discourse by diverting attention from the central arguments. Tactics such as ad hominem attacks present Freire as a radical thinker, negatively affecting the critical understanding of his work. Analyzing these

fallacies is crucial to promoting a more balanced academic discussion on Freirean critical pedagogy.

4. Discussion

The analysis reveals that the documentary "A Face Oculta de Paulo Freire" employs systematic discursive manipulation strategies through the intensive use of argumentative fallacies, selective ideological frameworks, and a polarized emotional charge. The application of the Fallacy Density Index (FDI), with a value of 1.22 fallacies per minute, confirms a high frequency of fallacious reasoning that diverts attention from the genuine educational content proposed by Freire, creating a pattern of systematic argumentative distortion.

These findings align with Entman's (1993) approach to framing as a process of selecting and highlighting certain aspects of reality to guide public interpretation, and reinforce Van Dijk's (1998) idea that ideological discourses simplify and polarize social representations for purposes of symbolic domination.

Sentiment analysis reveals a marked tendency toward the construction of an emotionally negative narrative around Freire, intensifying the perception of threat and distrust toward his pedagogical proposals. This emotional strategy, described by Pennebaker et al. (2007), aims to influence cognitive reception processes and encourage reactive rather than reflective responses among the public.

From a methodological perspective, the combined use of algorithmic techniques and qualitative analysis allowed us to identify patterns of manipulation that were difficult to detect with the naked eye. However, it is essential to acknowledge that the application of automated tools, such as Syuzhet and VADER, poses limitations related to cultural sensitivity, semantic ambiguity, and the interpretation of complex discourses within their critical context.

The discursive strategy observed not only distorts Freire's legacy but also directly attacks his emancipatory conception of education. As Freire (1970) states in Pedagogy of the Oppressed, "true education is praxis, reflection, and action of man upon the world in order to transform it" (p. 48). Caricaturing his thought as an incitement to violence ignores the dialogical, ethical, and humanistic foundation that permeates his entire work.

Furthermore, the emphasis on Freire's supposed violence distorts his fundamental idea of "righteous anger" as the driving force of social transformation, understood not as physical

violence, but as a critical consciousness in the face of structural injustices (Freire, 1992). The emotional manipulation detected in the documentary trivializes this essential distinction, reducing the complexity of his proposal to a simplistic narrative of ideological confrontation.

From a theoretical perspective, the strategy identified in the documentary responds to a broader dynamic of cultural warfare, where disinformation is not an accident, but a systematic resource to reconfigure common sense and legitimize ideological projects of exclusion and inequality (Feitosa et al., 2022; Godoi & Dimitrov, 2022).

These mechanisms affect not only Freire's figure, but also the conditions necessary for democratic deliberation, critical thinking, and the construction of active citizenship, as he himself argued: "Authentic literacy cannot be separated from awareness" (Freire, 1985, p. 92).

Although this study proposes a combined methodology of discursive and algorithmic analysis, it is important to recognize some inherent limitations of the approach adopted. First, the identification and classification of fallacies involves an interpretive component that may vary depending on the analyst's training, context, and critical sensitivity, which introduces a degree of subjectivity into the coding process.

Furthermore, the algorithmic tools used, such as VADER and Syuzhet, rely on pre-trained emotional dictionaries, which can affect their accuracy in culturally or semantically specific contexts, such as Brazilian political discourse. These libraries struggle to capture nuances such as irony, sarcasm, ambiguity, or double entendres, which limits the automatic interpretation of specific fragments.

Finally, the object of analysis, a highly ideologized documentary, is embedded in a particular political and cultural context that can influence both the production and reception of discourses. Therefore, the results should be understood as a contextualized critical approach, rather than as an objective or generalizable truth.

Therefore, the results obtained underscore the urgent need to strengthen critical media literacy programs that can identify and resist discursive manipulation techniques, as well as to revitalize critical pedagogy as a tool for social transformation. Although this study focused on a particular case, its implications can be extrapolated to a broader phenomenon: the growing sophistication of disinformation strategies in the digital age and the need to build critical defenses that respect human dignity and the right to transformation.

5. Conclusions

This study showed that the documentary "A Face Oculta de Paulo Freire" employs systematic strategies of discursive manipulation, utilizing argumentative fallacies, selective ideological framing, and polarized emotional content to distort public perceptions of Paulo Freire's legacy. The application of the Fallacy Density Index (FDI), combined with sentiment analysis, enabled the quantification and characterization of these disinformation dynamics, confirming a sustained pattern of emotional and argumentative distortion.

The findings corroborate that the misrepresentation of figures who promote critical emancipation, such as Freire, responds to cultural warfare dynamics that seek to shape common sense and reinforce projects of ideological exclusion (Entman, 1993; Van Dijk, 1998). In this context, Freire's pedagogy, based on dialogue, reflection, and social transformation (Freire, 1970), becomes a strategic target of media disinformation.

From a methodological perspective, the study demonstrates the effectiveness of integrating algorithmic techniques and qualitative analysis in detecting manipulative narratives in audiovisual products. However, limitations associated with the cultural and contextual biases present in current sentiment analysis and framing algorithms are recognized, suggesting the need to move toward more sensitive and adaptive approaches.

In this sense, the future development of more advanced tools, such as Artificial General Intelligence (AGI) systems capable of interpreting complex contexts and detecting fallacies more accurately, could strengthen critical capacity in the face of media manipulation strategies. This line of research, although incipient, represents an opportunity to expand discursive analysis tools in increasingly sophisticated digital environments.

Ultimately, the results highlight the importance of enhancing critical media literacy programs that equip audiences to recognize emotional, logical, and narrative manipulation techniques. Freire's critical pedagogy, centered on raising awareness and transforming social reality, remains an indispensable guide for addressing the contemporary challenges of disinformation and polarization, and for defending the possibility of a genuinely democratic citizenship.

For future research, the Fallacy Density Index (FDI) could be applied in comparative studies across different audiovisual media or digital platforms to map argumentative patterns in political, educational, or informational discourses. It will be necessary to validate the FDI in

different discursive contexts to ensure its robustness and applicability. Its incorporation into pedagogical practices would allow teachers and students to develop critical skills in the face of disinformation through a structured analysis of rhetorical persuasion strategies.

Furthermore, the development of artificial intelligence models specifically trained to detect fallacies in Spanish and Portuguese would represent a significant advance in the automation of discursive analysis. These developments could be integrated with critical media literacy proposals, thereby strengthening the capacity for discernment in educational environments that are increasingly influenced by polarized narratives.

Within this framework, a complementary approach would be the creation of a computational dictionary of argumentative fallacies, structured with formal definitions, contextual examples, and recurring linguistic patterns. This resource would enable training algorithms capable of automatically identifying fallacious structures in authentic texts, as well as articulating argumentation theory, discourse analysis, and natural language processing (NLP) technologies. Combined with automatic transcription systems, its application could be extended to the analysis of audio and video, allowing the detection of manipulative patterns in audiovisual content through automated spoken language processing.

Its potential application encompasses both academic research and critical teaching, at a time when narrative control has become a contested field. Language models such as BETO, RoBERTa, spaCy, or the Transformers tools from Hugging Face could be adapted to this task through fine-tuning or hybrid rules, configuring a semantic alert system similar to a traffic light for patterns of argumentative manipulation, with applications in multiple fields such as education, communication, politics, journalism, and digital humanities.

Ultimately, studies on media manipulation should continue to be guided by Freire's vision, which emphasizes that critical thinking is essential for transforming reality and humanizing society. As he himself stated, "for critical thinking, the permanent transformation of reality, with a view to the permanent humanization of humanity" (Freire, 1970, p. 112).

6. Bibliographic references

Bennett, W. L., y Livingston, S. (2018). The Disinformation Age: A new era of political information disorder. *Journal of Communication, 68*(2), 209-224. https://doi.org/10.1093/joc/jqx012

Bonsanto, A. (2022). Historicidades mediadas em disputa: O empreendimento político de Brasil Paralelo e a ditadura militar. *Educação, Cultura e Comunicação, 13*(26). https://doaj.org/article/cba122e2d10b44b1b6b9cbfcb245f851

Brasil Paralelo. (2024, febrero 24). *A face oculta de Paulo Freire* [Vídeo]. YouTube. https://www.youtube.com/watch?v=z38x_WevnSg

Busón, C., Carabali Angola A., Pérez Mendoza, K., y Diez Rodríguez, A. (2022). Análisis de los comentarios a un pronunciamiento presidencial sobre el Covid-19 en Brasil, realizado el 23 de marzo de 2021. *Ámbitos. Revista Internacional De Comunicación*, (57), 138-156. https://doi.org/10.12795/Ambitos.2022.i57.08

Busón, C. (2020). La minería de opinión para el análisis del discurso de odio en las redes sociales: Un estudio de caso sobre Paulo Freire en YouTube durante el período 2007–2019. *Commons*. https://revistas.uca.es/index.php/cayp/article/view/5482

Costa, S. B., De Menezes, M. C., y Cunha, A. S., Jr. (2021, octubre 4). Paulo Freire na atualidade: Um resgate necessário. *Revista Latino-Americana de Estudos Científicos*, *2*(10), 146-158. https://periodicos.ufes.br/ipa/article/view/36116

Da Silva Martins, D. (2024). O revisionismo histórico da Brasil Paralelo: alguns apontamentos e possibilidades de enfrentamento. *Revista Angelus Novus*, 20, e220575. https://doi.org/10.11606/issn.2179-5487.20.2024.220575

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51-58. https://doi.org/10.1111/j.1460-2466.1993.tb01304.x

Feitosa, D. S., Santos, G. F. dos, y Silva, S. R. P. da. (2022). Paulo Freire e a pedagogia libertadora: Uma ameaça à perspectiva de educação neoliberal da (extrema) direita no Brasil. *Filosofia e Educação, 14*(1), 201-221. https://doi.org/10.20396/rfe.v14i1.8668581

Finger, V. (2022). História, mídia digital e anti-ciência: A quimera narrativa do canal Brasil Paralelo. *Historiæ, 12*(2), 83–104. https://furg.emnuvens.com.br/hist/article/view/13477

Freire, P. (1992). *Pedagogia da esperança: Um reencontro com a pedagogia do oprimido*. Paz e Terra.

Freire, P. (1985). *Por uma pedagogia da pergunta* (5.ª ed.). Paz e Terra.

Freire, P. (1970). *Pedagogía del oprimido*. Siglo XXI Editores.

Gadotti, M. (1996). *Paulo Freire: Uma biobibliografia*. Cortez/Instituto Paulo Freire/Unesco.

Gil de Zúñiga, H., Ardèvol-Abreu, A., & Casau, R. F. (2017). Effects of the News-Finds-Me Perception in Communication: Social Media Use Implications for News Seeking and Learning About Politics. *Journal of Computer-Mediated Communication*, *22*(4), 183–198. https://doi.org/10.1111/jcc4.12204

Gitlin, T. (1980). *The whole world is watching: Mass media in the making & unmaking of the new left*. University of California Press.

Godoi, R., y Dimitrov, E. (2022). Construção de Paulo Freire como inimigo nacional. *Políticas Culturais em Revista, 15*(1), 315-343. https://doi.org/10.9771/pcr.v15i1.47378

Goffman, E. (1986). *Frame analysis: An essay on the organization of experience*. Harper & Row.

Gruner, C., y Cleto, M. (2021). Sete denúncias: Guerra cultural e retórica antissistema no documentário da Brasil Paralelo sobre a pandemia. En R. Oliveira, D. Christino, & E. Machado Jr. (Eds.), *COVID-19 e a comunicação* (pp. 357-382). Cegraf UFG. https://bit.ly/3NfFSIh

Han, B.-C. (2022). *Infocracia: La digitalización y la crisis de la democracia*. Taurus.

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. University of Chicago Press.

Joaquim, R. (2021). LeIA: A lightweight library for text analysis. *GitHub*. https://raw.githubusercontent.com/rafjaa/LeIA

Jockers, M. L. (2023). *Syuzhet: Extract sentiment and plot arcs from text (R package version 1.0.6)*. Comprehensive R Archive Network (CRAN). https://cran.r-project.org/web/packages/Syuzhet/index.html

Jockers, M. L. (2017). Syuzhet: Extracting sentiment and sentiment-based plot arcs from text. *GitHub*. https://github.com/mjockers/Syuzhet

Johnson, T. E., y McCauley, B. D. (2021). Cognitive biases and misinformation: How social media affects the perception of reality. *Journal of Media Psychology, 26*(1), 38-50. https://doi.org/10.1027/1864-1105/a000271

Kaser, O., y Lemire, D. (2007). Tag-cloud drawing: Algorithms for cloud visualization. *Proceedings of the 16th International World Wide Web Conference (WWW 2007)*, 1-10. https://doi.org/10.48550/arXiv.cs/0703109

Lakoff, G. (2004). *Don't think of an elephant! Know your values and frame the debate*. Chelsea Green Publishing.

Lewandowsky, S., Ecker, U. K. H., & Cook, J. (2012). Beyond misinformation: Understanding and coping with the "post-truth" era. *Psychological Science in the Public Interest, 13*(3), 106–131. https://doi.org/10.1177/1529100612451018

Liu, B. (2012). *Sentiment analysis and opinion mining*. Morgan & Claypool Publishers. https://doi.org/10.2200/S00416ED1V01Y201204HLT016

Magalhães Rodrigues, T. (2022). A razão da conveniência na construção histórica: a Brasil Paralelo e o Golpe de 1964. *Revista Café Com Sociologia*, 11. https://revistacafecomsociologia.com/revista/index.php/revista/article/view/1351

Mohammad, S., & Turney, P. (2013). Crowdsourcing a word-emotion association lexicon. *Computational Intelligence, 29*(3), 436-465. https://doi.org/10.1111/j.1467-8640.2012.00460.x

Moraes, E. de O., y Cleto, M. P. (2023). A última cruzada: Tempo e historicidade na série da produtora Brasil Paralelo. *Revista Tempo e Argumento, 15*(38), e0108. https://doi.org/10.5965/2175180315382023e0108

Oliveira, V. F. M. D. (2023). A Brasil Paralelo e o bolsonarismo: Uma análise a partir da trilogia Pátria Educadora. https://rd.uffs.edu.br/handle/prefix/7274

Pennebaker, J. W. (2011). *The secret life of pronouns: Control your language, control your life*. Bloomsbury Press.

Pennebaker, J. W., Booth, R. J., & Francis, M. E. (2007). *Linguistic inquiry and word count: LIWC*. Lawrence Erlbaum Associates. https://bit.ly/4euSXth

Picoli, B. A., Chitolina, V., y Guimarães, R. (2020). Revisionismo histórico e educação para a barbárie: A verdade da "Brasil Paralelo". *Revista UFG, 20*(26). https://doi.org/10.5216/revufg.v20.64896

Ribeiro de Almeida Chacon, D., Sousa Marçal, C. C., and Choucair Vaz, A. (2023). O agravamento da desigualdade social no Brasil no governo de extrema direita: Ataques aos direitos humanos e ao ideário crítico de Paulo Freire. *Com a Palavra, O Professor, 8*(22), 182-201. http://revista.geem.mat.br/index.php/CPP/article/view/973

Salgado, J., & Ferreira, J. M. (2021). Paralelismos em disputa: O papel da Brasil Paralelo na atual guerra cultural. *Revista Eco-Pós*, *24*(2), 726–738. https://doi.org/10.29146/ecopos.v24i2.27797

Santos, M. A. M. B. D. (2021). Agenda conservadora, ultraliberalismo e "guerra cultural": "Brasil Paralelo" e a hegemonia das direitas no Brasil contemporâneo (2016-2020). https://tede.unioeste.br/handle/tede/5774

Van Dijk, T. A. (1998). *Ideology: A multidisciplinary approach*. SAGE Publications.

Vrydagh, F., y Jiménez-Martínez, C. (2021). Conversando com a direita: Polarização perniciosa no Brasil e a filosofia de Paulo Freire. *Matrizes, 15*(3), 223-243. https://doi.org/10.11606/issn.1982-8160.v15i3p223-243

Walton, D. N. (2012). *Lógica informal: Manual de argumentação crítica* (2ª ed.). WMF Martins Fontes.

Wolton, D. (2009). *La comunicación y la cultura en la era digital*. Gedisa.

Zimbardo, P. G., y Leippe, M. R. (1991). *The psychology of attitude change and social influence*. McGraw-Hill.